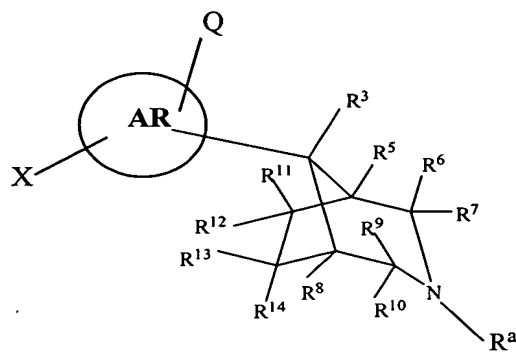
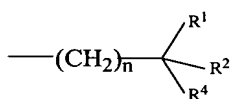


We claim:

1. A compound according to formula I, or a pharmaceutically acceptable salt thereof:



I



wherein R^a is H or a

group;



is an aryl or heteroaryl group;

X is H, halogen, -OH, -CN, $-C\equiv C-R^{3a}$, a C_1 - C_4 alkyl group optionally substituted with from one to three halogen atoms, or a $-O(C_1-C_4 \text{ alkyl})$ group optionally substituted with from one to three halogen atoms;

Q is H, halogen, a C_1 - C_6 alkyl, -OH, -CN, $-OCH_3$, $-NH_2$, $-NH(C_1-C_4 \text{ alkyl})$, $-N(C_1-C_4 \text{ alkyl})(C_1-C_4 \text{ alkyl})$, $-C(=O)NH_2$, $-C(=O)NH(C_1-C_4 \text{ alkyl})$, $-C(=O)N(C_1-C_4 \text{ alkyl})(C_1-C_4 \text{ alkyl})$, $-NHC(=O)R^{15}$, $-NHS(=O)_2R^{15}$, a 5- to 7-membered carbocyclic or heterocyclic group, or forms a 5- to 7-membered phenyl-fused or heteroaryl-fused carbocyclic or heterocyclic group with an adjacent atom on the phenyl or heteroaryl group to which it is attached, said phenyl-fused or heteroaryl-fused carbocyclic or heterocyclic group optionally containing at least one unsaturated bond, said heterocyclic group or said phenyl-fused or heteroaryl-fused heterocyclic group containing at least one heteroatom selected from nitrogen, oxygen and sulfur, said carbocyclic or heterocyclic group or said phenyl- or heteroaryl-fused carbocyclic or heterocyclic group being optionally substituted with at least one substituent selected from H, halogen, -OH, $=O$, $-C\equiv C-R^{3a}$, C_1 - C_6 alkyl, $-O(C_1-C_6 \text{ alkyl})$, C_3 - C_6 cycloalkyl, or $-(CH_2)_n$ -aryl, wherein said C_1 - C_6 alkyl, $-O(C_1-C_6 \text{ alkyl})$, or C_3 - C_6 cycloalkyl groups optionally may be substituted by one or more halogen atoms and said aryl portion of said $-(CH_2)_n$ -aryl is optionally substituted by one or more substituents selected from H, halogen, C_1 - C_4 alkyl and $-O(C_1-C_4 \text{ alkyl})$, said C_1 - C_4 alkyl and $-O(C_1-C_4 \text{ alkyl})$ groups being optionally substituted by one

or more halogen atoms, $-N(R^{4a})(R^{5a})$, $-N(R^{4b})S(O)_mR^{6a}$, $-N(R^{4c})C(O)R^{7a}$ or $-N(R^{4d})C(O)OR^{7b}$ groups;

R^{3a} , R^{4a} , R^{4b} , R^{4c} , R^{4d} and R^{5a} are independently H or C₁-C₆ alkyl which may be optionally substituted with one or more halogen groups, or R^{4a} and R^{5a} , together with the nitrogen atom to which they are bound, form a 4- to 7-membered heterocyclic group which may be unsubstituted or substituted with one or more substituents selected from C₁-C₄ alkyl, -O(C₁-C₄)alkyl, -OH, =O, -NR^{16a}R^{16b}, halogen or -C≡C-R^{3a};

R^{6a} is a C₁-C₆ alkyl, an aryl or a heteroaryl group wherein said alkyl, aryl or heteroaryl group is unsubstituted or substituted with one or more substituents selected from halogen, C₁-C₄ alkyl, -OH, -O(C₁-C₄ alkyl), -(C₁-C₄ alkyl)-O-(C₁-C₄ alkyl) or -(CH₂)_n-NR²¹R²²;

R^{7a} and R^{7b} are independently selected from C₁-C₆ alkyl, C₃-C₆ cycloalkyl, and aryl (wherein each of said C₁-C₆ alkyl, C₃-C₆ cycloalkyl, and aryl may independently be unsubstituted or substituted with halogen or C₁-C₄ alkyl substituents), or R^{7a} is H;

R^1 and R^2 are independently H, a C₁-C₆ alkyl, -(CH₂)_j-aryl, -(CH₂)_j-heteroaryl, wherein said alkyl, -(CH₂)_j-aryl or -(CH₂)_j-heteroaryl group is optionally substituted with one or more R¹⁶ groups, or with the carbon to which R^1 and R^2 are attached, R^1 and R^2 form a C₃-C₇ carbocyclic or 4- to 7-membered heterocyclic group, wherein said heterocyclic group comprises from one to three heteroatoms selected from the group consisting of O, S and N and said carbocyclic or heterocyclic group optionally contains a -C(=O) group or optionally contains one or more double bonds and is optionally fused to or substituted with a C₆-C₁₄ aryl or a 5- to 14-membered heteroaryl group, wherein said C₃-C₇ carbocyclic or 4- to 7-membered heterocyclic group formed by R^1 and R^2 may optionally be substituted with from one to three R¹⁶ groups, and said optionally fused or substituted aryl or heteroaryl group may each optionally independently be substituted with from one to six R¹⁶ groups;

each R¹⁶ is independently selected from R¹⁷, H, halogen, -OR¹⁷, -NO₂, -CN, -C₁-C₆ alkyl, -C₃-C₆ cycloalkyl, -C(R⁴)R^{16a}R^{16b}, aryl optionally substituted with from 1 to 3 R⁴ groups, -(CH₂)_vNR¹⁷R¹⁸, -NR¹⁷C(=O)R¹⁸, -C(=O)NR¹⁷R¹⁸, -OC(=O)R¹⁷, -C(=O)OR¹⁷, -C(=O)R¹⁷, -NR¹⁷C(=O)OR¹⁸, -NR¹⁷C(=O)N R¹⁸R¹⁹, -NR¹⁷S(=O)₂R¹⁸, -NR¹⁷S(=O)₂NR¹⁸R¹⁹, and -S(=O)₂R¹⁷;

R^3 is H, F, Cl, -OH, -C₁-C₄ alkyl, -C≡N, -NR¹⁷C(=O)R¹⁸, -C(=O)NR¹⁷R¹⁸, -O(C₁-C₄)alkyl, -(CH₂)_nOH, -(CH₂)_n-C≡N, -(CH₂)_n-NR¹⁷C(=O)R¹⁸, -(CH₂)_n-C(=O)NR¹⁷R¹⁸, -(CH₂)_n-O(C₁-C₄)alkyl, or -(CH₂)_n-NR^{16a}R^{16b};

R^4 is absent or is H, -C₁-C₄ alkyl, which optionally contains one or two unsaturated bonds, -OH, -O(C₁-C₄)alkyl, -(C₁-C₄)alkylOH, -(CH₂)_n-NR^{16a}R^{16b}, -(CH₂)_n-NHC(=O)(C₁-C₄ alkyl), -(CH₂)_n-NO₂, -(CH₂)_n-C≡N, -(CH₂)_n-C(=O)NH₂, -(CH₂)_n-C(=O)NR^{16a}R^{16b};

R^5 and R^8 are independently selected from H, Cl, F, -OH, C₁-C₄ alkyl, -O(C₁-C₄)alkyl, -C(=O)R²⁰, -(C₁-C₄ alkyl)-OR²⁰, -C(=O)OR²⁰, -OC(=O)R²⁰, -S(O)_mR²⁰ and -NH₂SO₂(C₁-C₄)alkyl;

$R^6, R^7, R^9, R^{10}, R^{11}, R^{12}, R^{13}$ and R^{14} are each independently selected from H, F, Cl, -OH, $-(C_1-C_4)\text{alkyl}$ and $-O(C_1-C_4)\text{alkyl}$;

R^{15}, R^{17}, R^{18} and R^{19} are independently H, $-C_1-C_4$ alkyl, $-(C_2-C_4 \text{ alkyl})-O-(C_1-C_4 \text{ alkyl})$, $-(CH_2)_v-NR^{21}R^{22}$, or a 4- to 7-membered heterocyclic group optionally substituted with a $-C_1-$

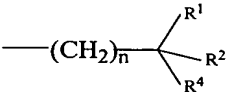
5 C_4 alkyl;

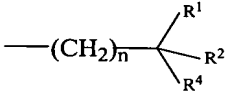
each R^{16a} and R^{16b} is independently selected from H and C_1-C_4 alkyl; or, independently in each instance of $-C(R^4)R^{16a}R^{16b}$, R^{16a} and R^{16b} connect to form a C_3-C_7 carbocyclic ring;

R^{20} is a C_1-C_4 alkyl group, a C_3-C_7 carbocyclic or a 4- to 7-membered heterocyclic group comprising from one to three heteroatoms selected from the group consisting of O, S and N, wherein said carbocyclic and heterocyclic groups are optionally independently substituted with from one to three R^{16} groups, optionally independently contain one or more double bonds, and are optionally fused to a C_6-C_{14} aryl or a C_5-C_{14} heteroaryl group comprising from one to three heteroatoms selected from the group consisting of O, S and N, and wherein said optionally fused aryl or heteroaryl groups can each optionally independently be substituted with from one to six R^{16} groups;

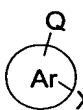
R^{21} and R^{22} are each independently H or C_1-C_6 alkyl; or, independently in each instance of $-NR^{21}R^{22}$, R^{21} and R^{22} connect to form a 4- to 7-membered heterocyclic ring comprising from one to three hetero atoms selected from O, S, and N;

20 j is in each instance independently an integer from 0 to 5;
 m is in each instance independently an integer from 0 to 2;
 n is in each instance independently an integer from 0 to 5;
 v is in each instance independently an integer from 0 to 5;
or a pharmaceutically acceptable salt thereof;
25 with the provisos that

a) when R^a is  and n is 0, and when the carbon to which R^1, R^2 and R^4 are bound is sp^3 hybridized (i.e., "saturated"), then none of R^1, R^2 and R^4 can be a heteroatom or contain a heteroatom which is directly linked to the carbon of said


 group;

30 b) R^{15} cannot be H when part of a $-NHS(=O)_2R^{15}$ group, R^{17} cannot be H when part of a $-S(=O)_2R^{17}$ group and R^{18} cannot be H when part of a $-NR^{17}S(=O)_2R^{18}$ group;

c) when R^3 is OCH_3 or OH ,  cannot be 3-hydroxyphenyl or 3-methoxyphenyl;

d) when  is a phenyl group, then Q and X are not both H;

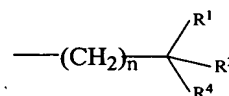
e) when $-(CH_2)_v-$ is connected to N, O, or S, then v cannot be 1; and

f)  cannot be 4-(6-amino-pyridin-2-yl)-phenyl.

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2. A compound according to claim 1 wherein R^a is a


group and wherein  is a phenyl group.



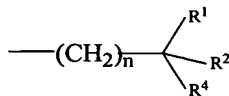
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4. A compound according to claim 2 wherein X is H, F or $C \equiv N$.

5. A compound according to any of claim 2, wherein R^3 is H, OH, Cl, methyl, ethyl, isopropyl, OMe, OEt, O-*i*Pr, O-allyl or O-*n*-Pr.

6. A compound according to claim 1, wherein  is a phenyl group; Q is substituted at a meta position on said phenyl group and is selected from $-C(=O)NH_2$, $-OH$ and

15

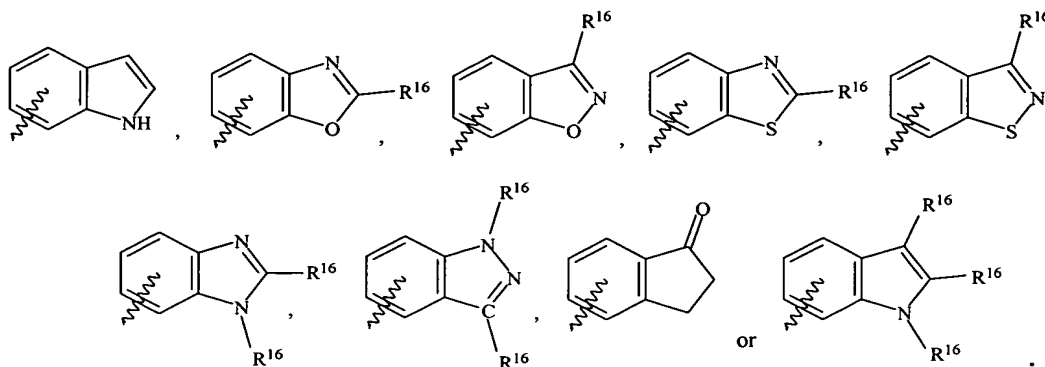
$-NHSO_2R^{15}$; R^a is a  group; and R^1 and R^2 taken together with the carbon to which they are attached form a cyclobutane, cyclopentane, cyclohexane, indane-2-yl or 1,2,3,4-tetrahydronaphth-2-yl which may be unsubstituted or substituted with R^{16} groups; and wherein R^4 is H, OH, $-NH(=O)-CH_3$, $-C(=O)NH_2$, $-CH_2OH$ or $-OCH_3$.

7. A compound according to claim 2, wherein n is 1, 2 or 3.

20

8. A compound according to claim 2 R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} and R^{14} are each H.

9. A compound according to claim 1 wherein Q forms a phenyl-fused heterocyclic group with the adjacent phenyl group, wherein said Q group and said phenyl group form a group according to the chemical structure:



- 5 10. A compound according to claim 1 selected from
- 3-(3-Cyclopropylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenol;
- 3-(3-Ethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-(3-Cyclopropylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[3-(3-Cyclohexyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenol;
- 10 3-[8-Methoxy-3-(3-methyl-butyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-(8-Methoxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[8-Methoxy-3-(1H-pyrrol-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-(3-Hexyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[3-(2-Ethyl-butyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 15 2-[8-(3-Hydroxy-phenyl)-3-aza-bicyclo[3.2.1]oct-3-ylmethyl]-indan-2-ol;
- 3-[8-Methoxy-3-(1-methyl-1H-pyrrol-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-(8-Methoxy-3-thiophen-3-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-(8-Methoxy-3-thiazol-2-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 20 3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-(3-hydroxy-phenyl)-3-aza-bicyclo[3.2.1]octan-8-ol;
- N-[3-(3-Cyclopropylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- 3-(8-Methoxy-3-phenethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 25 3-(2-Hydroxy-indan-2-ylmethyl)-8-(3-hydroxy-phenyl)-3-aza-bicyclo[3.2.1]octan-8-ol;
- N-[3-(3-Isobutyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- 3-(8-Methoxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[3-(3-(1-Hydroxy-cyclohexyl)-propyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenol;

- 3-[8-Methoxy-3-(3-phenyl-prop-2-ynyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
 3-[8-Methoxy-3-(3-phenyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
 2-[8-(3-Hydroxy-phenyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-3-ylmethyl]-indan-2-ol;
 N-{3-[8-Methoxy-3-(3-methyl-butyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-
 5 methanesulfonamide;
 N-[3-(8-Methoxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
 3-[3-(1H-Indol-3-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
 3-(3-Benzofuran-2-ylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
 3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-
 10 yl]-benzamide;
 N-{3-[3-(2-Ethyl-butyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-
 methanesulfonamide;
 N-[3-(3-Hexyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
 3-(8-Methoxy-3-naphthalen-2-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
 15 3-{3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl}-
 benzamide;
 3-(8-Methoxy-3-quinolin-3-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
 N-[3-(8-Methoxy-3-pyridin-3-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-
 methanesulfonamide;
 20 3-[3-(4-Chloro-2-fluoro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
 3-[8-Methoxy-3-(1-methyl-1H-indol-3-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-
 benzamide;
 3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-hydroxy-3-aza-
 bicyclo[3.2.1]oct-8-yl]-benzamide;
 25 3-[3-(2-Hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-
 benzamide;
 N-[3-(8-Methoxy-3-thiazol-2-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-
 methanesulfonamide;
 3-[8-Methoxy-3-(2-phenethyloxy-ethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
 30 N-[3-(3-Heptyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-
 phenyl]-amide;
 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-methyl-butyl)-3-aza-
 bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
 35 N-[3-(8-Methoxy-3-phenethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-
 methanesulfonamide;

- 3-[3-(4-Hydroxy-naphthalen-1-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- N-{3-[3-(4-Fluoro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 5 3-[8-Methoxy-3-(4-pyrrolidin-1-yl-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-[8-Methoxy-3-(3-methyl-benzo[b]thiophen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 10 3-[3-(1-Hydroxy-3-phenyl-cyclobutylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- N-{3-[3-(2-Ethyl-hexyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- N-[3-(8-Methoxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- 15 2-Methoxy-ethanesulfonic acid [3-(3-hexyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 3-(3-Biphenyl-4-ylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- N-{3-[3-(2-Hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 20 N-{3-[8-Methoxy-3-(4-methoxy-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-pyridin-3-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 3-[8-Methoxy-3-(3-trifluoromethoxy-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 25 N-{3-[3-(4-Chloro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-thiophen-3-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 2-Methoxy-ethanesulfonic acid [3-(3-cyclohexylmethyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 30 N-(3-{8-Hydroxy-3-[3-(1-hydroxy-cyclohexyl)-propyl]-3-aza-bicyclo[3.2.1]oct-8-yl}-phenyl)-methanesulfonamide;
- 3-[3-(9H-Fluoren-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- N-{3-[3-(1H-Indol-3-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 35 methanesulfonamide;
- N-[3-(3-Benzofuran-2-ylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;

- N-{3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 3-[8-Methoxy-3-(3-phenoxy-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- N-{3-[8-Hydroxy-3-(2-hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 5 3-[3-(4-Dimethylamino-naphthalen-1-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-phenethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 10 N-[3-(8-Methoxy-3-naphthalen-1-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-[3-(8-Methoxy-3-naphthalen-2-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-(3-{3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl}-phenyl)-methanesulfonamide;
- 15 N-[3-(8-Methoxy-3-quinolin-4-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-[3-(8-Methoxy-3-quinolin-3-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- 20 N-{3-[3-(4-Chloro-2-fluoro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- N-{3-[8-Methoxy-3-(1-methyl-1H-indol-3-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 25 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-phenyl-prop-2-ynyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- N-{3-[8-Hydroxy-3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 30 N-{3-[3-(2-Hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-phenyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(4-chloro-benzyl)-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 35 N-{3-[3-(4-Hydroxy-naphthalen-1-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;

- 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(1H-indol-3-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- N-{3-[8-Methoxy-3-(4-pyrrolidin-1-yl-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 5 N-{3-[8-Methoxy-3-(3-methyl-benzo[b]thiophen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid [3-(3-benzofuran-2-ylmethyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- N-{3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 10 2,2,2-Trifluoro-N-{3-[3-(2-hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-acetamide;
- N-[3-(3-Biphenyl-4-ylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- 15 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-naphthalen-2-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-naphthalen-1-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 2-Methoxy-ethanesulfonic acid (3-{8-hydroxy-3-[3-(1-hydroxy-cyclohexyl)-propyl]-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl)-amide;
- 20 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-quinolin-4-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-quinolin-3-ylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 25 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(1-methyl-1H-indol-3-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- N-{3-[8-Methoxy-3-(3-trifluoromethoxy-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid{3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 30 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(2-hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- N-{3-[3-(9H-Fluoren-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 35 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(2-phenethyloxy-ethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;

- N-{3-[8-Methoxy-3-(3-phenoxy-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- N-{3-[3-(4-Dimethylamino-naphthalen-1-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 5 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(4-hydroxy-naphthalen-1-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(4-pyrrolidin-1-yl-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-methyl-benzo[b]thiophen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 10 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 15 2-Methoxy-ethanesulfonic acid [3-(3-biphenyl-4-ylmethyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(9H-fluoren-2-ylmethyl)-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 20 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-phenoxy-benzyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide; and
- 2-Methoxy-ethanesulfonic acid {3-[3-(4-dimethylamino-naphthalen-1-ylmethyl)-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 25 3-(3-Cyclopropylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenol;
- 3-(3-Ethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-(3-Cyclopropylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[3-(3-Cyclohexyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenol;
- 3-[8-Methoxy-3-(3-methyl-butyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 30 3-(8-Methoxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-(3-Hexyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[3-(2-Ethyl-butyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 2-[8-(3-Hydroxy-phenyl)-3-aza-bicyclo[3.2.1]oct-3-ylmethyl]-indan-2-ol;
- 3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-(3-hydroxy-phenyl)-3-aza-bicyclo[3.2.1]octan-8-
- 35 ol;
- N-[3-(3-Cyclopropylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;

- 3-(2-Hydroxy-indan-2-ylmethyl)-8-(3-hydroxy-phenyl)-3-aza-bicyclo[3.2.1]octan-8-ol;
N-[3-(3-Isobutyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-
methanesulfonamide;
- 5 3-(8-Methoxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
3-[8-Methoxy-3-(3-phenyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
N-{3-[8-Methoxy-3-(3-methyl-butyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-
methanesulfonamide;
N-[3-(8-Methoxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-
10 yl]-benzamide;
N-{3-[3-(2-Ethyl-butyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-
methanesulfonamide;
N-[3-(3-Hexyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
3-{3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl}-
15 benzamide;
3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-hydroxy-3-aza-
bicyclo[3.2.1]oct-8-yl]-benzamide;
3-[3-(2-Hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-
benzamide;
- 20 3-[8-Methoxy-3-(2-phenethyloxy-ethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
N-[3-(3-Heptyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-
phenyl]-amide;
2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-methyl-butyl)-3-aza-
25 bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
N-[3-(8-Methoxy-3-phenethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-
methanesulfonamide;
N-{3-[3-(4-Fluoro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-
methanesulfonamide;
- 30 3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-
bicyclo[3.2.1]oct-8-yl]-benzamide;
3-[3-(1-Hydroxy-3-phenyl-cyclobutylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-
benzamide;
N-{3-[3-(2-Ethyl-hexyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-
35 methanesulfonamide;
N-[3-(8-Methoxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;

- 2-Methoxy-ethanesulfonic acid [3-(3-hexyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- N-{3-[3-(2-Hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 5 N-{3-[3-(4-Chloro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid [3-(3-cyclohexylmethyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- N-(3-{8-Hydroxy-3-[3-(1-hydroxy-cyclohexyl)-propyl]-3-aza-bicyclo[3.2.1]oct-8-yl}-phenyl)-methanesulfonamide;
- 10 N-{3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- N-{3-[8-Hydroxy-3-(2-hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 15 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-phenethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- N-(3-{3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl}-phenyl)-methanesulfonamide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 20 N-{3-[8-Hydroxy-3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- N-{3-[3-(2-Hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 25 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-phenyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- N-{3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 2,2,2-Trifluoro-N-{3-[3-(2-hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-acetamide;
- 30 2-Methoxy-ethanesulfonic acid (3-{8-hydroxy-3-[3-(1-hydroxy-cyclohexyl)-propyl]-3-aza-bicyclo[3.2.1]oct-8-yl}-phenyl)-amide;
- 2-Methoxy-ethanesulfonic acid{3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 35 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(2-hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;

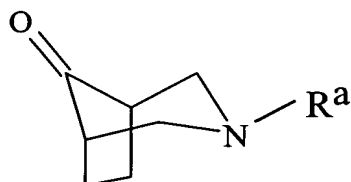
- 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(2-phenethyloxy-ethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 5 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 10 3-(3-Ethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-(3-Cyclopropylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[8-Methoxy-3-(3-methyl-butyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-(8-Methoxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-(3-Hexyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[3-(2-Ethyl-butyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 15 3-(8-Methoxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-benzamide;
- 3-[8-Methoxy-3-(3-phenyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-{3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl}-benzamide;
- 20 benzamide;
- 3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-[3-(2-Hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 25 3-[8-Methoxy-3-(2-phenethyloxy-ethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 3-[3-(1-Hydroxy-3-phenyl-cyclobutylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-benzamide;
- 30 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-methyl-butyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid [3-(3-hexyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 35 2-Methoxy-ethanesulfonic acid [3-(3-cyclohexylmethyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;

- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-phenethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 2-Methoxy-ethanesulfonic acid [3-(8-hydroxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-amide;
- 5 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(3-phenyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid (3-[8-hydroxy-3-[3-(1-hydroxy-cyclohexyl)-propyl]-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl)-amide;
- 2-Methoxy-ethanesulfonic acid{3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 10 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(2-hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[8-hydroxy-3-(2-phenethyloxy-ethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 15 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 2-Methoxy-ethanesulfonic acid {3-[3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-amide;
- 20 N-[3-(3-Cyclopropylmethyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-[3-(3-Isobutyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- 25 N-{3-[8-Methoxy-3-(3-methyl-butyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- N-[3-(8-Methoxy-3-pentyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-{3-[3-(2-Ethyl-butyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 30 N-[3-(3-Hexyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-[3-(3-Heptyl-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-[3-(8-Methoxy-3-phenethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
- N-{3-[3-(4-Fluoro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
- 35 N-{3-[3-(2-Ethyl-hexyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;

- N-[3-(8-Methoxy-3-octyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenyl]-methanesulfonamide;
N-{3-[3-(2-Hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
N-{3-[3-(4-Chloro-benzyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
5 N-(3-{8-Hydroxy-3-[3-(1-hydroxy-cyclohexyl)-propyl]-3-aza-bicyclo[3.2.1]oct-8-yl}-phenyl)-methanesulfonamide;
N-{3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
10 N-{3-[8-Hydroxy-3-(2-hydroxy-indan-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
N-(3-{3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl}-phenyl)-methanesulfonamide;
N-{3-[8-Hydroxy-3-(2-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
15 N-{3-[3-(2-Hydroxy-indan-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
N-{3-[3-(2-Hydroxy-1,2,3,4-tetrahydro-naphthalen-2-ylmethyl)-8-methoxy-3-aza-bicyclo[3.2.1]oct-8-yl]-phenyl}-methanesulfonamide;
20 3-(3-Cyclopropylmethyl-3-aza-bicyclo[3.2.1]oct-8-yl)-phenol;
3-(3-Cyclopropylmethyl-8-hydroxy-3-aza-bicyclo[3.2.1]oct-8-yl)-phenol;
3-{3-[3-(1-Hydroxy-cyclohexyl)-propyl]-3-aza-bicyclo[3.2.1]oct-8-yl}-phenol;
3-[3-(1-Hydroxy-cyclohexyl)-propyl]-8-(3-hydroxy-phenyl)-3-aza-bicyclo[3.2.1]octan-8-ol;
25 3-[3-(3-Cyclohexyl-propyl)-3-aza-bicyclo[3.2.1]oct-8-yl]-phenol;
3-(3-Cyclohexyl-propyl)-8-(3-hydroxy-phenyl)-3-aza-bicyclo[3.2.1]octan-8-ol;
2-[8-(3-Hydroxy-phenyl)-3-aza-bicyclo[3.2.1]oct-3-ylmethyl]-indan-2-ol; and
3-(2-Hydroxy-indan-2-ylmethyl)-8-(3-hydroxy-phenyl)-3-aza-bicyclo[3.2.1]octan-8-ol;
and pharmaceutically acceptable salts thereof.
- 30 11. A pharmaceutical composition comprising an effective amount of a compound according to claim 1 in combination with a pharmaceutically acceptable carrier, excipient or additive.
12. A method of treating in a mammal, in need thereof, a disease state, disorder or condition selected from the group consisting of irritable bowel syndrome, constipation,
35 nausea, vomiting, pruritic dermatoses, psoriasis; eczema; an insect bite; eating disorders, depression, anxiety, schizophrenia; drug addiction, an opioid overdose, sexual dysfunction, stroke, head trauma, traumatic brain injury, spinal damage, Parkinson's disease, Alzheimer's

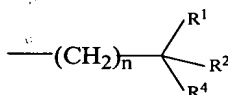
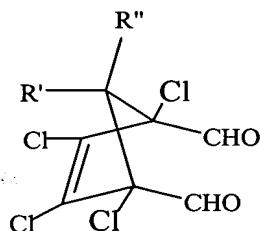
disease, age-related cognitive decline and Attention Deficit and Hyperactivity Disorder, said method comprising administering to said mammal an amount of a compound according to claim 1 effective in treating said disease state, disorder or condition.

13. A method of synthesizing a compound of the formula:



5

comprising reacting a primary amine compound of formula R^aNH_2 with a compound of the formula:



10

where R^a is H or a

group;

15

R^1 and R^2 are independently H, a C_1 - C_6 alkyl, $-(CH_2)_j$ -aryl, $-(CH_2)_j$ -heteroaryl, wherein said alkyl, $-(CH_2)_j$ -aryl or $-(CH_2)_j$ -heteroaryl group is optionally substituted with one or more R^{16} groups, or with the carbon to which R^1 and R^2 are attached, R^1 and R^2 form a C_3 - C_7 carbocyclic or 4- to 7-membered heterocyclic group, wherein said heterocyclic group comprises from one to three heteroatoms selected from the group consisting of O, S and N and said carbocyclic or heterocyclic group optionally contains a $-C(=O)$ group or optionally contains one or more double bonds and is optionally fused to or substituted with a C_6 - C_{14} aryl or a 5- to 14-membered heteroaryl group, wherein said C_3 - C_7 carbocyclic or 4- to 7-membered heterocyclic group formed by R^1 and R^2 may optionally be substituted with from one to three R^{16} groups, and said optionally fused or substituted aryl or heteroaryl group may each optionally independently be substituted with from one to six R^{16} groups;

20

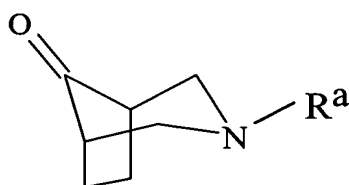
R^4 is absent or is H, $-C_1$ - C_4 alkyl, which optionally contains one or two unsaturated bonds, $-OH$, $-O(C_1-C_4)alkyl$, $-(C_1-C_4)alkylOH$, $-(CH_2)_n-NR^{16a}R^{16b}$, $-(CH_2)_n-NHC(=O)(C_1-C_4 alkyl)$, $-(CH_2)_n-NO_2$, $-(CH_2)_n-C\equiv N$, $-(CH_2)_n-C(=O)NH_2$, $-(CH_2)_n-C(=O)NR^{16a}R^{16b}$;

each R^{16a} and R^{16b} is independently selected from H and C_1 - C_4 alkyl; or, independently in each instance of $-C(R^4)R^{16a}R^{16b}$, R^{16a} and R^{16b} connect to form a C_3 - C_7 carbocyclic ring;

j is in each instance independently an integer from 0 to 5;

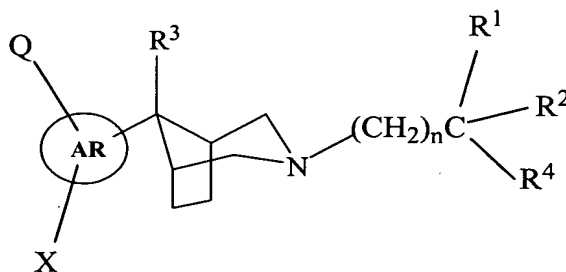
5 n is in each instance independently an integer from 0 to 5;

and R' and R'' together represent a carbonyl protecting group or groups, under reductive amination or reducing conditions; and thereafter removing said protecting groups R' and R'' to form



10

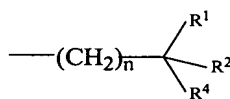
14. A method of synthesizing a compound of the formula IV:



IV

15

wherein R^a is H or a



group;



is an aryl or heteroaryl group;

X is H, halogen, -OH, -CN, $-C\equiv C-R^{3a}$, a $-C_1$ - C_4 alkyl group optionally substituted with from one to three halogen atoms, or a $-O(C_1$ - C_4 alkyl) group optionally substituted with from one to three halogen atoms;

20

Q is H, halogen, a C_1 - C_6 alkyl, -OH, -CN, -OCH₃, -NH₂, -NH(C_1 - C_4 alkyl), -N(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -C(=O)NH₂, -C(=O)NH(C_1 - C_4 alkyl), -C(=O)N(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -NHC(=O)R¹⁵, -NHS(=O)₂R¹⁵, a 5- to 7-membered carbocyclic or heterocyclic group, or forms

a 5- to 7-membered phenyl-fused or heteroaryl-fused carbocyclic or heterocyclic group with an adjacent atom on the phenyl or heteroaryl group to which it is attached, said phenyl-fused or heteroaryl-fused carbocyclic or heterocyclic group optionally containing at least one unsaturated bond, said heterocyclic group or said phenyl-fused or heteroaryl-fused heterocyclic group containing at least one heteroatom selected from nitrogen, oxygen and sulfur, said carbocyclic or heterocyclic group or said phenyl- or heteroaryl-fused carbocyclic or heterocyclic group being optionally substituted with at least one substituent selected from H, halogen, -OH, =O, -C≡C-R^{3a}, C₁-C₆ alkyl, -O(C₁-C₆)alkyl, C₃-C₆ cycloalkyl, or -(CH₂)_n-aryl, wherein said C₁-C₆ alkyl, -O(C₁-C₆)alkyl, or C₃-C₆ cycloalkyl groups optionally may be substituted by one or more halogen atoms and said aryl portion of said -(CH₂)_n-aryl is optionally substituted by one or more substituents selected from H, halogen, C₁-C₄ alkyl and -O(C₁-C₄)alkyl, said C₁-C₄ alkyl and -O(C₁-C₄)alkyl groups being optionally substituted by one or more halogen atoms, -N(R^{4a})(R^{5a}), -N(R^{4b})S(O)_mR^{6a}, -N(R^{4c})C(O)R^{7a} or -N(R^{4d})C(O)OR^{7b} groups;

R^{3a}, R^{4a}, R^{4b}, R^{4c}, R^{4d} and R^{5a} are independently H or C₁-C₆ alkyl which may be optionally substituted with one or more halogen groups, or R^{4a} and R^{5a}, together with the nitrogen atom to which they are bound, form a 4- to 7-membered heterocyclic group which may be unsubstituted or substituted with one or more substituents selected from C₁-C₄ alkyl, -O(C₁-C₄)alkyl, -OH, =O, -NR^{16a}R^{16b}, halogen or -C≡C-R^{3a};

R^{6a} is a C₁-C₆ alkyl, an aryl or a heteroaryl group wherein said alkyl, aryl or heteroaryl group is unsubstituted or substituted with one or more substituents selected from halogen, C₁-C₄ alkyl, -OH, -O(C₁-C₄ alkyl), -(C₁-C₄ alkyl)-O-(C₁-C₄ alkyl) or -(CH₂)_n-NR²¹R²²;

R^{7a} and R^{7b} are independently selected from C₁-C₆ alkyl, C₃-C₆ cycloalkyl, and aryl (wherein each of said C₁-C₆ alkyl, C₃-C₆ cycloalkyl, and aryl may independently be unsubstituted or substituted with halogen or C₁-C₄ alkyl substituents), or R^{7a} is H;

R¹ and R² are independently H, a C₁-C₆ alkyl, -(CH₂)_j-aryl, -(CH₂)_j-heteroaryl, wherein said alkyl, -(CH₂)_j-aryl or -(CH₂)_j-heteroaryl group is optionally substituted with one or more R¹⁶ groups, or with the carbon to which R¹ and R² are attached, R¹ and R² form a C₃-C₇ carbocyclic or 4- to 7-membered heterocyclic group, wherein said heterocyclic group comprises from one to three heteroatoms selected from the group consisting of O, S and N and said carbocyclic or heterocyclic group optionally contains a -C(=O) group or optionally contains one or more double bonds and is optionally fused to or substituted with a C₆-C₁₄ aryl or a 5- to 14-membered heteroaryl group, wherein said C₃-C₇ carbocyclic or 4- to 7-membered heterocyclic group formed by R¹ and R² may optionally be substituted with from one to three R¹⁶ groups, and said optionally fused or substituted aryl or heteroaryl group may each optionally independently be substituted with from one to six R¹⁶ groups;

each R^{16} is independently selected from R^{17} , H, halogen, $-OR^{17}$, $-NO_2$, $-CN$, $-C_1-C_6$ alkyl, $-C_3-C_6$ cycloalkyl, $-C(R^4)R^{16a}R^{16b}$, aryl optionally substituted with from 1 to 3 R^4 groups, $-(CH_2)_vNR^{17}R^{18}$, $-NR^{17}C(=O)R^{18}$, $-C(=O)NR^{17}R^{18}$, $-OC(=O)R^{17}$, $-C(=O)OR^{17}$, $-C(=O)R^{17}$, $-NR^{17}C(=O)OR^{18}$, $-NR^{17}C(=O)NR^{18}R^{19}$, $-NR^{17}S(=O)_2R^{18}$, $-NR^{17}S(=O)_2NR^{18}R^{19}$, and $-S(=O)_2R^{17}$;

R^3 is H, F, Cl, $-OH$, $-C_1-C_4$ alkyl, $-C\equiv N$, $-NR^{17}C(=O)R^{18}$, $-C(=O)NR^{17}R^{18}$, $-O(C_1-C_4)alkyl$, $-(CH_2)_nOH$, $-(CH_2)_n-C\equiv N$, $-(CH_2)_n-NR^{17}C(=O)R^{18}$, $-(CH_2)_n-C(=O)NR^{17}R^{18}$, $-(CH_2)_n-O(C_1-C_4)alkyl$, or $-(CH_2)_n-NR^{16a}R^{16b}$;

R^4 is absent or is H, $-C_1-C_4$ alkyl, which optionally contains one or two unsaturated bonds, $-OH$, $-O(C_1-C_4)alkyl$, $-(C_1-C_4)alkylOH$, $-(CH_2)_n-NR^{16a}R^{16b}$, $-(CH_2)_n-NHC(=O)(C_1-C_4)alkyl$, $-(CH_2)_n-NO_2$, $-(CH_2)_n-C\equiv N$, $-(CH_2)_n-C(=O)NH_2$, $-(CH_2)_n-C(=O)NR^{16a}R^{16b}$;

R^{15} , R^{17} , R^{18} and R^{19} are independently H, $-C_1-C_4$ alkyl, $-(C_2-C_4)alkyl-O-(C_1-C_4)alkyl$, $-(CH_2)_v-NR^{21}R^{22}$, or a 4- to 7-membered heterocyclic group optionally substituted with a $-C_1-C_4$ alkyl;

each R^{16a} and R^{16b} is independently selected from H and C_1-C_4 alkyl; or, independently in each instance of $-C(R^4)R^{16a}R^{16b}$, R^{16a} and R^{16b} connect to form a C_3-C_7 carbocyclic ring;

R^{20} is a C_1-C_4 alkyl group, a C_3-C_7 carbocyclic or a 4- to 7-membered heterocyclic group comprising from one to three heteroatoms selected from the group consisting of O, S and N, wherein said carbocyclic and heterocyclic groups are optionally independently substituted with from one to three R^{16} groups, optionally independently contain one or more double bonds, and are optionally fused to a C_6-C_{14} aryl or a C_5-C_{14} heteroaryl group comprising from one to three heteroatoms selected from the group consisting of O, S and N, and wherein said optionally fused aryl or heteroaryl groups can each optionally independently be substituted with from one to six R^{16} groups;

R^{21} and R^{22} are each independently H or C_1-C_6 alkyl; or, independently in each instance of $-NR^{21}R^{22}$, R^{21} and R^{22} connect to form a 4- to 7-membered heterocyclic ring comprising from one to three hetero atoms selected from O, S, and N;

j is in each instance independently an integer from 0 to 5;

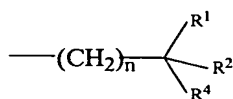
m is in each instance independently an integer from 0 to 2;

n is in each instance independently an integer from 0 to 5;

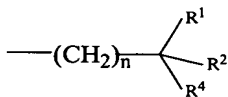
v is in each instance independently an integer from 0 to 5;

or a pharmaceutically acceptable salt thereof;

with the provisos that



a) when R^a is and n is 0, and when the carbon to which R^1 , R^2 and R^4 are bound is sp^3 hybridized (i.e., "saturated"), then none of R^1 , R^2 and R^4 can be a heteroatom or contain a heteroatom which is directly linked to the carbon of said



group;

- 5 b) R^{15} cannot be H when part of a $-NHS(=O)_2R^{15}$ group, R^{17} cannot be H when part of a $-S(=O)_2R^{17}$ group and R^{18} cannot be H when part of a $-NR^{17}S(=O)_2R^{18}$ group;



c) when R^3 is OCH_3 or OH , cannot be 3-hydroxyphenyl or 3-methoxyphenyl;



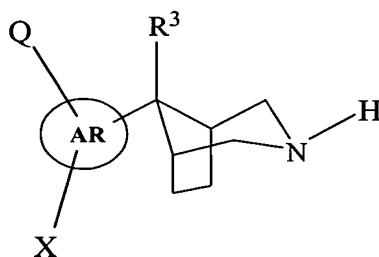
d) when is a phenyl group, then Q and X are not both H;

e) when $-(CH_2)_v-$ is connected to N, O, or S, then v cannot be 1; and

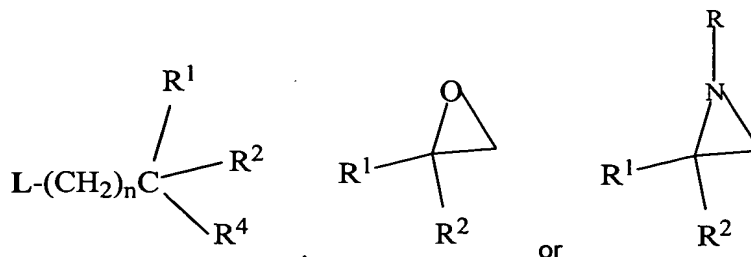


- 10 f) cannot be 4-(6-amino-pyridin-2-yl)-phenyl;

which method comprises reacting a compound according to the chemical structure:

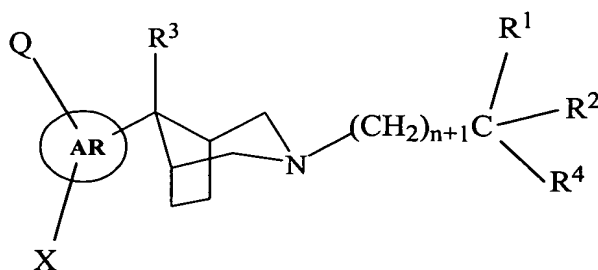


with a reactive compound according to the chemical structure:

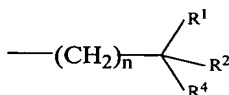


- 15 where L is a leaving group, R is H, SO_2R^b or CO_2R^b and R^b is an aryl or a C_1 - C_4 alkyl group to provide a compound of the formula IV.

15. A method of synthesizing a compound according to chemical structure IVa:



IVa



5 wherein R^a is H or a

group;



is an aryl or heteroaryl group;

X is H, halogen, -OH, -CN, -C≡C-R^{3a}, a -C₁-C₄ alkyl group optionally substituted with from one to three halogen atoms, or a -O(C₁-C₄ alkyl) group optionally substituted with from one to three halogen atoms;

10 Q is H, halogen, a C₁-C₆ alkyl, -OH, -CN, -OCH₃, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(=O)NH₂, -C(=O)NH(C₁-C₄ alkyl), -C(=O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -NHC(=O)R¹⁵, -NHS(=O)₂R¹⁵, a 5- to 7-membered carbocyclic or heterocyclic group, or forms
15 heteroaryl-fused carbocyclic or heterocyclic group optionally containing at least one unsaturated bond, said heterocyclic group or said phenyl-fused or heteroaryl-fused heterocyclic group containing at least one heteroatom selected from nitrogen, oxygen and sulfur, said carbocyclic or heterocyclic group or said phenyl- or heteroaryl-fused carbocyclic or heterocyclic group being optionally substituted with at least one substituent selected from H,
20 halogen, -OH, =O, -C≡C-R^{3a}, C₁-C₆ alkyl, -O(C₁-C₆)alkyl, C₃-C₆ cycloalkyl, or -(CH₂)_n-aryl, wherein said C₁-C₆ alkyl, -O(C₁-C₆)alkyl, or C₃-C₆ cycloalkyl groups optionally may be substituted by one or more halogen atoms and said aryl portion of said -(CH₂)_n-aryl is optionally substituted by one or more substituents selected from H, halogen, C₁-C₄ alkyl and -O(C₁-C₄)alkyl, said C₁-C₄ alkyl and -O(C₁-C₄)alkyl groups being optionally substituted by one
25 or more halogen atoms, -N(R^{4a})(R^{5a}), -N(R^{4b})S(O)_mR^{6a}, -N(R^{4c})C(O)R^{7a} or -N(R^{4d})C(O)OR^{7b} groups;

R^{3a}, R^{4a}, R^{4b}, R^{4c}, R^{4d} and R^{5a} are independently H or C₁-C₆ alkyl which may be optionally substituted with one or more halogen groups, or R^{4a} and R^{5a}, together with the

nitrogen atom to which they are bound, form a 4- to 7-membered heterocyclic group which may be unsubstituted or substituted with one or more substituents selected from C₁-C₄ alkyl, -O(C₁-C₄)alkyl, -OH, =O, -NR^{16a}R^{16b}, halogen or -C≡C-R^{3a};

R^{6a} is a C₁-C₆ alkyl, an aryl or a heteroaryl group wherein said alkyl, aryl or heteroaryl group is unsubstituted or substituted with one or more substituents selected from halogen, C₁-C₄ alkyl, -OH, -O(C₁-C₄ alkyl), -(C₁-C₄ alkyl)-O-(C₁-C₄ alkyl) or -(CH₂)_n-NR²¹R²²;

R^{7a} and R^{7b} are independently selected from C₁-C₆ alkyl, C₃-C₆ cycloalkyl, and aryl (wherein each of said C₁-C₆ alkyl, C₃-C₆ cycloalkyl, and aryl may independently be unsubstituted or substituted with halogen or C₁-C₄ alkyl substituents), or R^{7a} is H;

R¹ and R² are independently H, a C₁-C₆ alkyl, -(CH₂)_j-aryl, -(CH₂)_j-heteroaryl, wherein said alkyl, -(CH₂)_j-aryl or -(CH₂)_j-heteroaryl group is optionally substituted with one or more R¹⁶ groups, or with the carbon to which R¹ and R² are attached, R¹ and R² form a C₃-C₇ carbocyclic or 4- to 7-membered heterocyclic group, wherein said heterocyclic group comprises from one to three heteroatoms selected from the group consisting of O, S and N and said carbocyclic or heterocyclic group optionally contains a -C(=O) group or optionally contains one or more double bonds and is optionally fused to or substituted with a C₆-C₁₄ aryl or a 5- to 14-membered heteroaryl group, wherein said C₃-C₇ carbocyclic or 4- to 7-membered heterocyclic group formed by R¹ and R² may optionally be substituted with from one to three R¹⁶ groups, and said optionally fused or substituted aryl or heteroaryl group may each optionally independently be substituted with from one to six R¹⁶ groups;

each R¹⁶ is independently selected from R¹⁷, H, halogen, -OR¹⁷, -NO₂, -CN, -C₁-C₆ alkyl, -C₃-C₆ cycloalkyl, -C(R⁴)R^{16a}R^{16b}, aryl optionally substituted with from 1 to 3 R⁴ groups, -(CH₂)_vNR¹⁷R¹⁸, -NR¹⁷C(=O)R¹⁸, -C(=O)NR¹⁷R¹⁸, -OC(=O)R¹⁷, -C(=O)OR¹⁷, -C(=O)R¹⁷, -NR¹⁷C(=O)OR¹⁸, -NR¹⁷C(=O)N R¹⁸R¹⁹, -NR¹⁷S(=O)₂R¹⁸, -NR¹⁷S(=O)₂NR¹⁸R¹⁹, and -S(=O)₂R¹⁷;

R³ is H, F, Cl, -OH, -C₁-C₄ alkyl, -C≡N, -NR¹⁷C(=O)R¹⁸, -C(=O)NR¹⁷R¹⁸, -O(C₁-C₄)alkyl, -(CH₂)_nOH, -(CH₂)_nC≡N, -(CH₂)_n-NR¹⁷C(=O)R¹⁸, -(CH₂)_n-C(=O)NR¹⁷R¹⁸, -(CH₂)_n-O(C₁-C₄)alkyl, or -(CH₂)_n-NR^{16a}R^{16b};

R⁴ is absent or is H, -C₁-C₄ alkyl, which optionally contains one or two unsaturated bonds, -OH, -O(C₁-C₄)alkyl, -(C₁-C₄)alkylOH, -(CH₂)_n-NR^{16a}R^{16b}, -(CH₂)_n-NHC(=O)(C₁-C₄ alkyl), -(CH₂)_n-NO₂, -(CH₂)_n-C≡N, -(CH₂)_n-C(=O)NH₂, -(CH₂)_n-C(=O)NR^{16a}R^{16b};

R¹⁵, R¹⁷, R¹⁸ and R¹⁹ are independently H, -C₁-C₄ alkyl, -(C₂-C₄ alkyl)-O-(C₁-C₄ alkyl), -(CH₂)_v-NR²¹R²², or a 4- to 7-membered heterocyclic group optionally substituted with a -C₁-C₄ alkyl;

each R^{16a} and R^{16b} is independently selected from H and C₁-C₄ alkyl; or, independently in each instance of -C(R⁴)R^{16a}R^{16b}, R^{16a} and R^{16b} connect to form a C₃-C₇ carbocyclic ring;

R^{20} is a C_1 - C_4 alkyl group, a C_3 - C_7 carbocyclic or a 4- to 7-membered heterocyclic group comprising from one to three heteroatoms selected from the group consisting of O, S and N, wherein said carbocyclic and heterocyclic groups are optionally independently substituted with from one to three R^{16} groups, optionally independently contain one or more
 5 double bonds, and are optionally fused to a C_6 - C_{14} aryl or a C_5 - C_{14} heteroaryl group comprising from one to three heteroatoms selected from the group consisting of O, S and N, and wherein said optionally fused aryl or heteroaryl groups can each optionally independently be substituted with from one to six R^{16} groups;

R^{21} and R^{22} are each independently H or C_1 - C_6 alkyl; or, independently in each
 10 instance of $-NR^{21}R^{22}$, R^{21} and R^{22} connect to form a 4- to 7-membered heterocyclic ring comprising from one to three hetero atoms selected from O, S, and N;

j is in each instance independently an integer from 0 to 5;

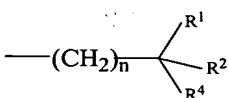
m is in each instance independently an integer from 0 to 2;

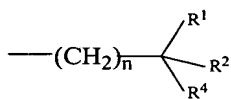
n is in each instance independently an integer from 0 to 5;

15 v is in each instance independently an integer from 0 to 5;

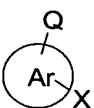
or a pharmaceutically acceptable salt thereof;


with the provisos that

a) when R^a is  and n is 0, and when the carbon to which R^1 , R^2 and R^4 are bound is sp^3 hybridized (i.e., "saturated"), then none of R^1 , R^2 and R^4 can be a
 20 heteroatom or contain a heteroatom which is directly linked to the carbon of said

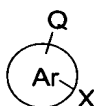
 group;

b) R^{15} cannot be H when part of a $-NHS(=O)_2R^{15}$ group, R^{17} cannot be H when part of a $-S(=O)_2R^{17}$ group and R^{18} cannot be H when part of a $-NR^{17}S(=O)_2R^{18}$ group;

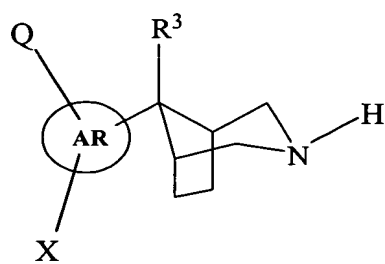
c) when R^3 is OCH_3 or OH,  cannot be 3-hydroxyphenyl or 3-methoxyphenyl;

d) when  is a phenyl group, then Q and X are not both H;

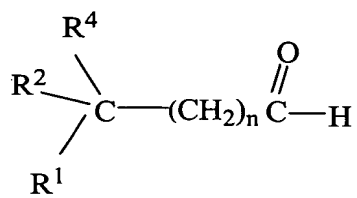
e) when $-(CH_2)_v-$ is connected to N, O, or S, then v cannot be 1; and

f)  cannot be 4-(6-amino-pyridin-2-yl)-phenyl;

which method comprises reacting a compound according to the chemical structure:



with a compound according to the structure:



under reductive amination or reducing conditions to produce the compound of formula

5 IVa.